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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,271	11/07/2001	Scott W. Huffer	9325-58 (153520)	7750

7590 02/01/2005
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EXAMINER

YAN, REN LUO

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 02/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

A

Office Action Summary	Application No. 10/037,271	Applicant(s) HUFFER, SCOTT W.	
	Examiner Ren L Yan	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 10-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1-22-2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Prosecution on the merits of this application is reopened on claims 1-7 and 10-14 that are considered unpatentable for the reasons indicated below:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 5-7 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barker et al(4,169,907) in view of Kawahata et al(5,019,202). The patent to Barker et al teaches a printing process as claimed comprising the steps of providing a coating (drying ink), adding a surface tension lowering additive to the ink (drying ink containing liquid repelling silicone oil), printing the coating onto a substrate in a pattern, curing the coating, applying an ink (coloring pigment containing liquid top coat) over the substrate and the printed coating, allowing the ink to flow from the printed coating pattern areas to the non-pattern areas (silicone oil repels ink from the pattern areas to form ridges adjacent the printed pattern), and allowing the ink to dry in the form of raised profile ridges. See Fig. 2, and column 3, line 22 through column 4, line 47 in Barker et al for details. However, Barker et al do not teach to cure the coating by electron beam processing. Kawahata et al teaches in a similar printing process the conventional use of electron beam process to cure a coating. See the paragraph bridging columns 11 and 12 in

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Kawahata et al for example. It would have been obvious to those having ordinary skill in the art at the time the invention was made to provide the printing process in Barker et al with the electron beam process as taught by Kawahata et al in order to more effectively cure the coating layer so as to obtain a desired appearance of the printed product.

With respect to claims 5-7 and 10-13, although Kawahata et al. do not teach the particular coatings or substrate materials set forth in the claims, it would have been obvious to one of ordinary skill in the art to use any desired coating material (metallic, multicolored, etc.) on any desired substrate (i.e., foils, clear films, etc.) to produce any desired coloring or effect, as this would simply involve the obvious selection of known materials based upon their known properties.

With respect to claim 14, Barker et al teach the use of silicone oil as the surface tension lowering additive and Kawahata et al. teach that any of a variety of surface tension lowering additives may be added to the ink. See column 6, lines 17-21 of Kawahata et al. In view of these teachings, it would have been obvious to one of ordinary skill in the art to use hydroxy-modified polyether silane or any surface tension lowering additive in the ink of Barker et al, as modified by Kawahata et al, as it simply requires the obvious selection of a known surface tension lowering material based upon its known properties.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barker et al in view of Kawahata et al. as applied to claim 1 above, and further in view of Sato et al. (US 5,665,457). Barker et al, as modified by Kawahata et al., teach all of the printing process steps as recited with the possible exception of the ink being printed in a pattern of parallel lines. However, note that the selection of the particular pattern of the ink appears to involve simply an

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obvious matter of design choice. Although Barker et al, as modified by Kawahata et al. may show some parallel lines in the printed pattern, Sato et al. teach a printing process including printing an ink in a pattern of substantially parallel lines as shown in the Figure. In view of this teaching, it would have been obvious to one of ordinary skill in the art to print the ink pattern of Barker et al, as modified by Kawahata et al., in any desired pattern, such as a pattern of substantially parallel lines, as it simply requires the obvious substitution of one design pattern for another.


Applicant is advised that the Notice of Allowance mailed on 1-2-2004 is vacated. If the issue fee has already been paid, applicant may request a refund or request that the fee be credited to a deposit account. However, applicant may wait until the application is either found allowable or held abandoned. If allowed, upon receipt of a new Notice of Allowance, applicant may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a specified Deposit Account.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on 571-272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Ren Yan", with a stylized flourish at the end.

Ren L Yan
Primary Examiner
Art Unit 2854

Ren Yan
Jan. 11, 2005